CLAIMS

I Claim

Claim 1. (Presently Amended) A method to generate a compact item descriptor, a machine readable character string, derived by classifying the item and assigning values to a list of parameters to describe the characteristics of the item such that two different items with the that generate the same compact item descriptor are interchangeable, the method comprising the steps:

defining a first item;

defining a second item;

defining a classification tree which classifies a set of items including the first item and second item such that the first item and second item classify to the same leaf node with the same parameter values if and only if the items are interchangeable; generating a commodity code for each branch and leaf of the classification tree starting with the commodity code for the root and appending as a suffix a unique character or unique sub-string of characters that represent a branch or leaf node at each fork such that the resulting character string uniquely identifies the sequence of branches and leaf node selected for the classification of an item represented by the leaf node;

defining a set of parameters for each leaf node that complete the description of an item classified at the leaf node and encode the possible value for each parameter as a character or string of characters such that the parameter values for an item classified at the leaf node are represented as a character string;

defining the compact item descriptor for an item as the commodity code for the item concatenated with the encoded parameter values for the item;

such that the first item and second item are interchangeable if and only if the compact item descriptor for the first item is the same as the compact item descriptor for the second item.

Claim 2. (Presently Amended) The compact item descriptor of claim 1 and a materials planning system and/or Approved Manufacturing list provide an item part number and item description field for the first item wherein the compact item descriptor for the first item is stored in the item description field of the materials planning system and/or the Approved Manufacturer List such that the item description field is queried using the compact item descriptor of the first item to return item part number as the response to the query.

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Claim 3. (Presently Amended) The compact item descriptor of claim 1 and a catalog wherein the first item and second item are interchangeable and thus, the compact item descriptor for the first item is the same as the compact item descriptor for the second item; and the catalog provides an entry for the first item comprising an item description field containing the compact item descriptor for the first item, supplier name, and supplier part number such that the catalog item description fields is-are queried with the compact item descriptor of-for ~~an~~the second item and a supplier name and the catalog responds with the supplier name and supplier part number for an interchangeablethe first item.

Claim 4. (Presently Amended) The compact item descriptor of claim 1 and a catalog wherein the catalog provides an entry for the first item comprising an item description field containing the compact item descriptor for the first item, the supplier name, and the supplier part number such that the catalog is queried with a-the supplier name and the supplier part number offor an-the first item and the catalog responds with the compact item descriptor of-for the first item.

Claim 5. (Presently Amended) The compact item descriptor of claim 1, a materials planning system and/or the Approved Manufacturer List , and a catalog wherein the materials planning system and/or the Approved Manufacturer List provides a part number for the first item and an item description field; and the catalog provides an entry for the first item comprising the supplier name, the supplier part number, and compact item descriptor for the first item where the catalog is queried with a-the supplier name and the supplier part number of an-the first item, the catalog responds with the compact item descriptor of the first item, and the compact item descriptor for the first item is stored in the item masteritem description field of the materials planning system and/or the Approved Manufacturer List for the item such that the materials planning system and/or the Approved Manufacturer List relates the part number of the first item with the compact item descriptor for the first item as the item description.

Claim 6. (Presently Amended) The compact item descriptor of claim 1 where the first item and second item are interchangeable and thus, the compact item descriptor for the first item is the same as the compact item descriptor for the second item; and an Approved Manufacturer List, AML, catalog wherein the catalog providing a part number, an item description field containing the compact item descriptor for the first item, a supplier name, and a supplier part number wherein the AML is queried with the compact item descriptor of

an the second item and the catalog AML responds with the supplier name and the supplier part number for an interchangeable item, the first item.

Claim 7. (Presently Amended) The compact item descriptor of claim 1, where the first item and second item are interchangeable and thus, the compact item descriptor for the first item is the same as the compact item descriptor for the second item; and an Approved Manufacturer List, AML, providing a part number, an item description field containing the compact item descriptor for the first item, the supplier name and the supplier part number for the first item and a catalog wherein the catalog providing an item description field containing the compact item descriptor of the second item, the supplier name and supplier part number for the second item wherein the catalog description fields are is queried with the compact item descriptor offor an the first item and a supplier name and the catalog responds with the supplier name and supplier part number for an interchangeable item, the second item; and the supplier name and supplier part number for the second item is are stored as an interchangeable into supplier name and the supplier part number field of in the materials planning system and/or the Approved Manufacturer List AML for the part number item.

Claim 8. (Presently Amended) The compact item descriptor of claim 1, where the first item and second item are interchangeable and thus, the compact item descriptor for the first item is the same as the compact item descriptor for the second item; and a catalog providing an item description field containing the compact item descriptor for the first item, a supplier name, and a supplier part number wherein the catalog item descriptor fields are queried with the compact item descriptor for the second item and the supplier name is translated to a catalog query and the catalog responds with the supplier name and supplier part number for an interchangeable item, the first item from the specified supplier.

Claim 9. (Cancel)

Claim 10. (Presently Amended) The compact item descriptor of claim 1 and a catalog wherein the catalog providing for the first item, a supplier name, supplier part number, and an item description field containing the first compact item descriptor and the catalog item description fields areis queried with the a compact item descriptor including a Standard Query Language, SQL, wild card character to partially specify a compact item descriptor where the first compact item descriptor matches the partially specified compact item

descriptor and the catalog responds with the supplier name and supplier part number of an interchangeablethe first item.

Claim 11. (Presently Amended) The compact item descriptor of claim 1 and a catalog wherein providing a description field containing the compact descriptor of the first item, a supplier name, and a core supplier part number wherein the catalog description fields are is queried with the compact item descriptor of anfor the first item and supplier name and the catalog responds with the core supplier part number for an interchangeable the first item and a supplier suffix table is queried with the supplier name and a manufacturing process requirement including error, and the supplier suffix table responds with the modification to the core supplier part number such that the resulting supplier part number corresponds to a an interchangeablefirst item that meets the manufacturing process requirement.

Claim 12. (Presently Amended) A method for generating compact item descriptor, a machine readable character string, describing an item such that two different items with generating the same compact item descriptor are interchangeable, the method comprising the stepsdefine a first item;

define a second item;

define a classification tree for a set of items including the first item and second item such that the first item and second item classify to the same leaf node with the same parameter values if and only if the items are interchangeable;

define a commodity code, a character string, for each leaf node that uniquely identifies the leaf node;

define a set of parameters for each leaf node that complete the description of an item classified at the leaf node and encode the value for each parameter as a character or string of characters such that the parameter values for an item classified at the leaf node are represented as a character string;

defining the compact item descriptor for an item as the commodity code for the item concatenated with the encoded parameter values for the item;

such that the first item and second item are interchangeable if and only if the compact item descriptor for the first item is the same as the compact item descriptor for the second item.

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